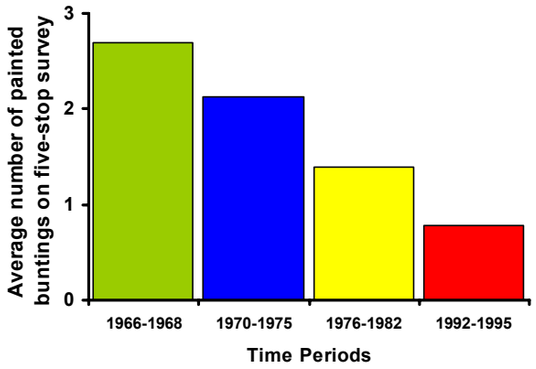
Georgia's coastal residents may feel surprised and thrilled when streaks of red, green and blue flash through their backyards. These colorful displays in flight belong to a prized, little songbird called the **painted bunting.** Homeowners and birders describe spotting its colorful plumage as awesome, dazzling and an unforgettable experience.

Unfortunately, such encounters may become much rarer as the painted bunting or *Passerina ciris* continues to decline in numbers. From North Carolina to Florida, painted buntings living along the Atlantic coast have declined in population by three per cent each year since the late 1960's. *That's a decline of greater than 60% in 30 years (1966-1995).*



A female painted bunting in the hand. Painted Buntings have been color leg banded for survival studies.

An aerial view of optimum nesting habitat for painted buntings along the Atlantic shoreline of Sapelo Island, Georgia

But with help from homeowners and land managers, the little bird described as *nonpareil* or "without equal," may yet return to its dazzling glory. Basically, painted buntings need a more understanding from human neighbors who are developing and building on Georgia's barrier islands and beaches.

Breeding Habits

Painted buntings are seed eating, Neotropical migrants. During spring and summer, the coastal area from North Carolina to northern Florida rings with their soft, musical, finch-like songs. Males in vivid plumage mark territories with these bursts of song, while less colorful females tend nests filled with 3 to 4 glossy white eggs that are finely speckled with chestnut-red.

Together, one male and female pair can raise two, and sometimes three, clutches of eggs in one season. By summer's end, six to 10 offspring may join parents flying south to winter in Cuba, south Florida, the Bahamas, or possibly the Yucatan Peninsula.

A second population exists in the Midwest and possibly in Mexico, but the coastal group rarely intermixes and both populations appear to be in serious trouble. Suspected causes for population decline include deteriorating habitat, a condition causing increased predation of parents and offspring. Habitat losses for nesting may also be a major problem.

Habitat Degradation

Painted Buntings prefer the shrubby forests found on Georgia's barrier islands and coastal mainland. The mixture of thick vegetation and open, grassy areas provides ideal protected cover for nests. Convenient, nearby food sources allow the nesting buntings to forage in open areas, searching the grasses, ground and shrubs for insects and seeds.

Unfortunately, human development and land management practices have and continue to alter potential bunting nest sites. Stands of shrubby wax myrtle and buckthorn or similar habitat in open-canopied pines and hardwoods are increasingly limited on Georgia's coast. Replacing native grasses and seeds with sod grass also denies buntings important food sources.

Ideal shrub and grassland habitat for nesting painted Buntings on Sapelo Island's Nanny Goat Beach. Only a few trees are found in this habitat.

Increased Predation and Thievery

As shrubs, ground cover and open-canopied forests disappear, buntings may relocate to less desirable habitat, providing fewer hiding places to avoid predation from rodents, owls, hawks, and climbing snakes.

Two, recently arrived, parasitic species are the brown-headed cowbird and its Caribbean cousin, the shiny cowbird. If allowed, female cowbirds replace momentarily unattended eggs with their own eggs and then fly off to never return.

Unsuspecting songbirds—including painted buntings—return to hatch and unknowingly feed cowbird chicks. This reduces the numbers of their own species reaching adulthood.

Research shows that cowbirds are not a common problem in *good habitat* in the southeastern Atlantic coastal states. Among scattered trees and shrubby vegetation, less that 8% of bunting nests, or one in 12, may be affected by cowbird parasitism and even fewer cowbirds survive—less than one cowbird in 36 painted bunting nests.

Can something be done?

Research shows that appropriately managing and preserving habitat—shrubs, beach dunes and forests adjacent to salt marsh—does mean higher survival rates for painted buntings. In short, better habitat equals better hiding places from prowling predators and parasites.

This means even developed or landscaped areas may be important sources of food for nearby nesting painted buntings. To include painted buntings in landscape planning, do the following:

1. Try to retain or preserve freshwater wetlands. Emergent wetlands combined with shrub or open forest-like settings are important habitat for painted buntings.

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2. Maintain shrub cover and native grasses in your landscaping plans. Some introduced grasses with large seeds such as bahia can be used by painted buntings.

3. Mow natural grass areas no more than once per year. Mowing grassland, preferably in mid-March, protects important food sources, nesting areas, and wintering grasslands.

4. Maintain scattered medium to large trees, which are important for singing perches; buntings need no more than one to two trees for every 2 to 3 acres (¾ to 1¼ hectares).

Open pine forest habitat with shrubs and grasses should be maintained with prescribed fire at least every six years.

Managing Private and Public Open Lands

Public and private land managers can provide habitat by maintaining some grasses and shrubby growth, such as those plants seen among beach dunes and forests next to salt marshes.

Open-canopied forests can support successful painted bunting reproduction if ground cover is greater than 50% grasses and mixed with large numbers of shrubs 3 to 18 feet high (1 to 5½ meters). Open-canopied forests should provide no more than 75% cover, preferably less. Under ideal conditions, a breeding painted bunting population of 100 to 200 pairs needs 1,200 to 2,500 acres (500 to 1,000 hectares) of continuous habitat.

In short:

1. Conserve old growth maritime forests and shrubby grasslands with scattered trees such as found between the beach dunes closest to the ocean and those dunes located farther back from the ocean.
2. Do not prescribe burn in beach dune habitats. Salt spray, drought, and storms will keep habitat in early, open and shrubby successional stages. Protect dunes from accidental fires.
3. Manage pine-oak or pine forests for saw timber with a basal area of 50 square feet per acre. Ground cover should be maintained with scattered scrubs 3 to 18 feet high and with many open areas covered by grass. Use prescribed burning every 4 to 6 years to create mixed patches of shrub and grass cover.
4. Painted buntings, especially juveniles, find freshwater wetlands important as feeding areas. Try to restore or conserve these emergent freshwater wetlands in areas within ½ mile (800 meters) of bunting nesting habitat.
5. Other habitats such as mowed dikes (cut in mid March only) and shrubby or open forest habitat can be important for painted buntings if freshwater emergent wetlands and salt marshes are adjacent or less than ½ mile away.

Conclusion

Humans do not have to cut themselves off from beaches and barrier islands to help painted buntings. With a degree of consideration and planning, this songbird considered by so many to be "without equal" may survive quite well with its new neighbors on Georgia's coast.

More information on painted buntings can be found at:

http://georgiawildlife.dnr.state.ga.us

http:://www.pwrc.usgs.gov

http://www.fws.gov/r4/gafo/

Get excited and help bring back the painted bunting!

A male painted bunting quivering its wings as it displays to a female nearby.

Text by Mike Hobbs and J. Michael Meyers
Photography by J. Michael Meyers and USGS

A Bird Without Equal —

Will It Survive?

Yes!
We can make a difference.

Male Painted Bunting singing in coastal Georgia shrub and grassland habitat.

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